

WHAT IS CLAIMED IS:

1. A method for preparing a polycarboxylic composition, characterized in that it comprises a stage
5 in which a monosaccharide composition undergoes an electrochemical oxidation treatment carried out in the absence of sodium hypochlorite and in the presence of a) an amine oxide and b) a carbon-based anode.
- 10 2. The method as claimed in claim 1, characterized in that said anode is based on a carbon material having a specific surface at least equal to $0.10 \text{ m}^2/\text{g}$, preferably at least equal to $0.20 \text{ m}^2/\text{g}$.
- 15 3. The method as claimed in claim 2, characterized in that said carbon material has a specific surface at least equal to $0.25 \text{ m}^2/\text{g}$.
4. The method as claimed in either of claims 2 and 3,
20 characterized in that said anode is selected from the group consisting of carbon felts and granular active charcoals.
5. The method as claimed in one of claims 1 to 4,
25 characterized in that said electrochemical oxidation treatment is carried out at a pH of between 10 and 14, preferably of between 11.5 and 14.
6. The method as claimed in claim 5, characterized in
30 that the pH is between 12 and 13.5.
7. The method as claimed in any one of claims 1 to 6, characterized in that said electrochemical oxidation treatment is also carried out in the absence of sodium
35 bromide.
8. A polycarboxylic composition obtainable by the method as claimed in any one of claims 1 to 7.

9. The polycarboxylic composition as claimed in claim 8, characterized in that it comprises:

- from 30 to 90% of one or more products chosen from dicarboxylic acids and their salts, and
 - from 3 to 50% of one or more products chosen from tricarboxylic acids and their salts,
- these percentages being expressed as dry weight with respect to the total dry weight of said composition.

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10. The polycarboxylic composition as claimed in claim 8, characterized in that it comprises:

- from 30 to 90% of glucaric acid, in the free acid form and/or in the form of (a) salt(s), and
- from 3 to 50% of 2-carboxy-2,3,4-trihydroxypentanedioic acid, in the free acid form and/or in the form of (a) salt(s).

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11. The polycarboxylic composition as claimed in claim 10, characterized in that it comprises in total at least 90% of glucaric acid and of 2-carboxy-2,3,4-trihydroxypentanedioic acid, this percentage being expressed as total dry weight of said products with respect to the total dry weight of said composition.

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12. 2-Carboxy-2,3,4-trihydroxypentanedioic acid, its salts and derivatives.

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13. The use of a composition as claimed in any one of claims 8 to 12 or obtained by the method as claimed in any one of claims 1 to 7 in the following industries: detergents and cleaning agents, water treatment, metal treatment, plant treatment, fibers treatment, in particular textile fibers or paper fibers, hydraulic binders, adhesives, founding, paints or leather, or in the food, pharmaceutical or cosmetic industries.

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